

Listing of the Claims

1. (original) A method of manufacturing a metallic filtration material, comprising the steps of:
 - (a) forming a metallic filtration media, and
 - (b) applying a protective coating to the metallic filtration media by either chemical vapour deposition or physical vapour deposition.
2. (original) A method according to claim 1, wherein the metallic filtration media is formed from metal fibres, metal powder, metal wires, woven metal mesh or any combination thereof.
3. (original) A method according to claim 1, further comprising the step of forming the metallic filtration material into a filter unit, by providing the filtration media with a supporting structure.
4. (original) A method according to claim 3, wherein the filtration media is applied to part or all of the supporting structure.
5. (original) A method according to claim 3, wherein part of all of the supporting structure is applied to the filtration media.
6. (original) A method according to claim 3, wherein the filtration media is provided with the supporting structure after the protective coating is applied to the filtration media.
7. (original) A method according to claim 3, wherein the filtration media is provided with the supporting structure before the protective coating is applied to the filtration media.

8. (original) A method according to claim 3, further including a step of applying the protective coating to the supporting structure.

9. (original) A method according to claim 3, wherein the filtration media and the supporting structure are provided with the protective coating in the same application process.

10. (original) A metallic filtration material comprising, a metallic filtration media, which metallic filtration media comprises a protective coating applied to the metallic filtration material by either chemical vapour deposition or physical vapour deposition.

11. (original) A metallic filtration material according to claim 10, wherein the protective coating comprises a ceramic, silica or metallic material.

12. (original) A metallic filtration material according to claim 10, wherein the thickness of the coating is less than 0.05 of the average pore size of the filtration media.

13. (original) A metallic filtration material according to claim 10, wherein the thickness of the coating is at least 0.00025 of the average pore size of the filtration media.

14. (original) A metallic filtration material according to claim 10, wherein the coating is at least 50 Angstrom thick.

15. (original) A metallic filtration material according to claim 10, wherein the coating is less than 2000 Angstrom thick.

16. (original) A metallic filtration material according to claim 10, wherein the average thickness of the protective coating is in the range of 200-1000 Angstrom.

17. (original) A metallic filtration material according to claim 10, wherein the metallic filtration material comprises metal fibres, metallic woven mesh, metal powder or any combination thereof.

18. (original) A metallic filtration material according to claim 17, wherein the metallic filtration media comprises iron, nickel or cobalt, or an alloy of one or more thereof.

19. (original) A filter unit comprising a metallic filtration media and a supporting structure, wherein the filtration media comprises a protective coating applied by either chemical vapour deposition or physical vapour deposition.

20. (original) A filter unit according to claim 19, wherein the supporting structure comprises a surface, core, framework or any combination thereof, arranged to support the filtration media.

21. (original) A filter unit according to claim 19, wherein the supporting structure comprises a wire mesh.

22. (original) A filter unit according to claim 21, wherein the wire mesh is arranged either upstream or downstream of the filtration media in use.

23. (original) A filter unit according to claim 19, wherein the supporting structure comprises a first wire mesh and a second wire mesh, one mesh located at the upstream side of the filtration media and the other mesh located at the downstream side of the filtration media in use.

24. (original) A filter unit according to any one of claims 19, wherein the supporting structure comprises a core about which the filtration material is supported.

25. (original) A filter unit according to any one of claims 19, wherein the supporting structure comprises one or more end cap.

26. (original) A filter unit according to any one of claims 19, wherein part or all of the supporting structure has a protective coating.

27. (original) A filter unit according to claim 19, wherein the whole of the filter unit has a protective coating applied thereto.